

REMARKS

Reconsideration and allowance of the application are respectfully requested in light of the above amendments and the following remarks.

Claims 29-44 have been cancelled without prejudice or disclaimer, and claims 45-60 have been added. No new matter is entered.

Amended claims 46-50 are directed to communications systems. Amended claims 46-50 have been derived from previous claims 29-33 respectively, and are supported by the 13th and 14th embodiments in the specification, in which, for example, the NAR 31 can notify MN 10 of a link local address of a default router 37 which is different from the NAR 31. (Specification, par. [0232]). (It should be noted that references herein to the specification and drawings are for illustrative purposes only and are not intended to limit the scope of the invention to any particular aspect of the referenced embodiments.)

Amended claim 46 defines that the mobile terminal explicitly requests a link local address of a default router immediately after executing the handover, and acquires the link local address of the default router which is different from the second access router (e.g., the NAR).

Amended claim 47 defines that the mobile terminal explicitly requests a link local address of a default router when transmitting a message V to notify a connection, such as, for example, an FNA message, and acquires the link local address of the default router which is different from the second access router (e.g., the NAR).

Amended claim 48 defines that information to request the link local address of the default router is added to the message V in amended claim 47, as shown, for example, by the “RS” on the right hand side of the information shown in FIG. 36A.

Amended claim 49 defines that information to request the link local address of the default router is transmitted by using a message other than the message V in amended claim 47, as shown, for example, in FIG. 38A.

Amended claim 50 defines that the mobile terminal transmits a message V to notify a connection, such as an FNA message (the message V itself plays a role of information to request a link address of a default router), as shown on the left-hand side in FIG. 36A, and acquires the link local address of the default router which is different from the second access router (e.g., the NAR).

Amended claims 51-55 are mobile terminal claims corresponding to communication system claims 46-50, respectively. Furthermore, amended claims 56-60 are access router claims also corresponding to communication system claims 46-50, respectively. Therefore, the technical features defined by amended claims 51-60 are also supported by the specification.

Independent claims 46, 47, 50, 51, 52, 55, 56, 57 and 60 have each been amended to recite the feature that a second access router notifies a mobile terminal of a link local address of a default router which is different from the second access router. (See, e.g., claim 46, reciting the feature "...the mobile terminal connected to said first subnet requests a link local address of a default router in said second subnet from said second access router immediately after executing a handover to said second subnet, and acquires said link local address of said default router which is different from said second access router from said second access router"). As mentioned above, this recited feature is supported by the 13th and 14th embodiments in the specification, in which NAR 31 can notify MN 10 of a link local address of a default router 37 which is different from NAR 31.

In the Office Action, claim 30 stands rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 20030103496 (Lakshmi Narayanan et al.) (hereinafter, “Lakshmi”). Claims 29, 31-35 and 37-42 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lakshmi in view of U.S. Patent Application Publication No. 20030026241 (Ono et al.) (hereinafter, “Ono”). Claims 36, 43 and 44 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lakshmi in view of Ono and U.S. Patent Application Publication No. 20040156347 (Kim) (hereinafter, “Kim”). To the extent that these rejections are applicable to new claims 47-60, it is respectfully submitted that the rejections should be withdrawn for at least the following reasons.

By way of review, Lakshmi is directed towards a “policy based mechanism to select a possible target (new) access router for context transfer.” Par. [0019]. Lakshmi discloses the following:

“When the MN 151 moves toward Autonomous System (AS2) 120, it receives identification information on a broadcast channel which may contain link layer information of a second base station (BS2) 127 or IP address of AR2120 or Autonomous System number associating some link local address or any combination information.” Par. [0035]

“If PS1105 receives only link layer identifier, it checks first with the policy database to see whether that is simply an intra domain handover.” Par. [0040].

Also, by way of review, Ono is directed towards a “hierarchical packet communication system which allows both of high speed handover and route optimization which is free from limitation in terms of a packet transfer route.” Par. [0031]. Ono discloses the following:

“More particularly, the router advertisement message processing section 54 produces and issues a ‘router advertisement’ wherein, for example, as seen in FIG. 17, an EN address (link local address of a router advertisement transmission node) is placed in the SA field 717; a THA address [the address of a THA 11 (21) which is in a local link (in other words, which accommodates the EN 12)] is placed in an MA address field 725 defined as a mobility option (Type: 100); and

an M3 network address is placed in an M3 network address field 726 defined as another mobility option (Type; 101).” Par. [0264] and [0265], FIG. 17.

Further, by way of review, Kim is directed towards a “handover method and apparatus, which are capable of handover latency in a small-sized WLAN environment, and an Internet control message protocol (ICMP) message used in such a WLAN environment.” Par. [0026]. Kim discloses the following:

“Referring to FIG. 3, when a mobile node 310 moves from BSS1 to BSS2, an L2 trigger occurs in BSS2. According to the present invention, the mobile node 310 multicasts a DIT information requesting message to an access router (PAR) 320 of BSS1 when it is booted in BSS1. Then, the PAR 320 transmits a DIT information response message to the mobile node 310 in response to the reception of the DIT information requesting message, and the mobile node 310 stores DIT information received from the PAR 320. Then, when the L2 trigger occurs, the mobile node 310 can identify BSSID of a new access router (NAR) 330. Thereafter, the mobile node 310 obtains prefix information of the NAR 330 by searching the DIT information for the identified BSSID. The mobile node 310 creates a care-of-address using the prefix information of the NAR 330 and carries out a binding update using the created care-of-address.” Par. [0043].

“Referring to FIG. 6, when the mobile node 400 of FIG. 4 is booted, the DIT information requesting unit 410 of the mobile node 400 multicasts a message requesting DIT information to an access router of a BSS that the mobile node 400 currently belongs to, in step S610.” Par. [0047].

In contrast to Lakshmi, Ono and Kim, the apparatuses claimed in the present application recite the feature that a second access router notifies a mobile terminal of a link local address of a default router which is different from the second access router. Also, apparatuses claimed in the present application have the technical feature that a mobile terminal obtains a link local address of a default router which is different from the second access router, so that the mobile terminal can transmit a packet outside immediately after the handover.

It is respectfully submitted that none of the prior art references teach or suggest these recited features of the independent claims.

Lakshmi

In Lakshmi, with respect to a link local address, Lakshmi discloses that a mobile terminal obtains a link local address of a base station, and a policy server uses a link local address received from the mobile terminal to see whether the mobile terminal's handover is simply an intra domain handover or not (see Lakshmi, par. [0035] and [0040]). However, Lakshmi fails to disclose the technical feature that a second access router notifies a mobile terminal of a link local address of a default router which is different from the second access router, as recited in the independent claims, above. Therefore, in Lakshmi, even though a mobile terminal obtains a link local address of a base station, it cannot quickly execute packet transmission to outside immediately after the handover, since the mobile terminal in Lakshmi does not know a link local address of a default router in the subnet where the mobile node is connected after handover.

Accordingly, it is respectfully submitted that Lakshmi fails to teach or suggest these recited features of the independent claims.

Furthermore, the Office Action alleges that Lakshmi's disclosure that "...the access router selection process where policy servers compute a list of possible access routers that may serve the MN 151" (par. [0036]) reads on the recited feature of "identifies a default router in said second subnet," as recited by previous claim 34. However, the Applicants disagree. Lakshmi's disclosure of the step of "computation of a list of possible access routers" is to determine possible access routers where a mobile terminal may be connected in order to transfer contexts. However, computing a list of possible access routers is quite different from the technical feature that "a mobile terminal identifies a default router in said second subnet."

Ono

In Ono, with respect to a link local address, Ono discloses that an Edge Node (EN) issues a router advertisement message including an EN address (link local address of a router advertisement transmission node) ([0264] and [0265], FIG. 17). That is, an Edge Node notifies a mobile node of its own link local address in a router advertisement message. However, Ono fails to disclose the technical feature that a second access router notifies a link local address of a default router which is different from the second access router, as recited by each of the independent claims. Furthermore, Ono is silent about when the Edge Node issues a router advertisement message, and fails to disclose the claimed technical feature that a mobile terminal obtains a link local address of a default router which is different from the second access router, so that the mobile terminal can transmit a packet outside immediately after the handover.

Accordingly, it is respectfully submitted that Ono also fails to teach or suggest these recited features of the claims.

Furthermore, at page 10, lines 10-14, the Office Action suggests that Ono discloses the claimed “default router.” However, paragraphs [0228]-[0230] of Ono discloses that a network node such as VHA, THA and EN has a router processing section 46 including a routing table 46a and an outgoing path determination section 46b. The outgoing path determination section 46b determines an outgoing path based on routing information stored in the routing table 46a. Generally, the routing table 46a may include information on a default router in the subnet since the network node is placed in the subnet to route packets. However, according to this disclosure, Ono fails to disclose the claimed technical features that a second access router notifies the mobile terminal of a link local address of a default router which is different from the second

access router, and that a mobile terminal obtains a link local address of a default router to transmit a packet outside immediately after the handover.

Kim

Kim discloses that a mobile node, before connecting or moving to a new subnet, stores DIT information, and obtains prefix information of a new access router by searching the DIT information when it receives a beacon message from the new access router. Kim discloses that a mobile node obtains DIT information by using a multicast request message. However, DIT information merely includes prefix information of a new access router. Therefore, Kim fails to disclose the claimed technical features that a second access router notifies the mobile terminal of a link local address of a default router which is different from the second access router, and that a mobile terminal obtains a link local address of a default router to transmit a packet outside immediately after the handover.

Accordingly, it is respectfully submitted that Kim also fails to teach or suggest these recited features of the claims.

Therefore, neither Lakshmi, Ono, or Kim, whether considered individually or in combination, disclose the claimed technical features that a second access router notifies the mobile terminal of a link local address of a default router which is different from the second access router, and that a mobile terminal obtains a link local address of a default router to transmit a packet outside immediately after the handover, as recited by each of the independent claims. Accordingly, it is respectfully submitted that claims 46-60 are patentable for at least these reasons.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

/James Edward Ledbetter/

Date: June 17, 2010
JEL/DEA/att

James E. Ledbetter
Registration No. 28,732

Attorney Docket No. L8638.6111
DICKINSON WRIGHT, PLLC
International Square
1875 Eye Street, NW
Suite 1200
Washington, D.C. 20006
Telephone: (202)-457-0160
Facsimile: (202)-659-1559

DC 8638-6111 155667